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10/086,785	02/28/2002	John A. Scott	112056-0048	8989
24267	7590	07/01/2005	EXAMINER	
CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210			DODDS, HAROLD E	
			ART UNIT	PAPER NUMBER
			2167	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/086,785

Applicant(s)

SCOTT, JOHN A.

Examiner

Harold E. Dodds, Jr.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 33 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. An electromagnetic signal on a computer network may be viewed as a signal in a wire. As such, the signal requires movement of physical matter such as electrons and the signal is the propagating disturbance in the medium and is not the medium itself. Since the electronic signal is not a "manufacture" it is not statutory.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Madnick et al (U.S. Patent No. 6,282,537).

5. Madnick anticipates independent claim 1 by the following:  
“...identifying, from a descriptor look up table, a series of actions to perform on elements...” at col. 4, lines 60-63 and col. 10, lines 7-12.  
“...of the file access data structure...” at col. 12, lines 63-65.  
“...and performing the identified series of actions on the elements...” at col. 4, lines 60-63 and col. 10, lines 7-12.  
“...of the file access data structure...” at col. 12, lines 63-65.

6. Claims 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Bowman-Amuah (U.S. Patent No. 6,434,568).

7. Bowman-Amuth anticipates independent claim 16 by the following:  
“...determining a type of the file access data structure...” at col. 112, lines 64-67 and col. 60, lines 1-3.  
“...processing, in response to the file access data structure of being of a first type...” at col. 258, lines 20-22, col. 228, lines 5-6, col. 60, lines 1-3, and col. 112, lines 64-67.  
“...the file access data structure along a first processing path...” at col. 60, lines 1-3, col. 258, lines 20-22, col. 112, lines 64-67, and col. 172, lines 60-61.  
“...processing, in response to the file access data structure being of a second type...” at col. 258, lines 20-22, col. 228, lines 5-6, col. 60, lines 1-3, and col. 112, lines 64-67.

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"...the file access data structure along a second processing path..." at col. 60, lines 1-3, col. 258, lines 20-22, col. 112, lines 64-67, and col. 172, lines 60-61.

8. As per claim 17, the "...first type further comprises a critical path data structure..." is taught by Bowman-Amuth at col. 109, lines 29-31 and col. 60, lines 1-3.

9. As per claim 18, the "...first processing path..." is taught by Bowman-Amuth at col. 258, lines 20-22 and col. 172, lines 60-61 and the "...further comprises a set of specifically coded functions..." is taught by Bowman-Amuth at col. 102, lines 63-69.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 11, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth (U.S. Patent No. 6,434,568) and Lee et al. (U.S. Patent No. 5,867,690).

12. Bowman-Amuth renders obvious independent claims 2 and 15 by the following:

"...determining if the file access data structure..." at col. 109, lines 29-31 and col. 60, lines 1-3.

"...is a critical path data structure..." at col. 50, lines 52-57, col. 172, lines 60-61, and col. 60, lines 1-3.

"...converting, in response to the file access data structure..." at col. 247, lines 5-8 and col. 60, lines 1-3.

"...being a critical path data structure..." at col. 50, lines 52-57, col. 172, lines 60-61, and col. 60, lines 1-3.

"...using a set of specific code functions..." at col. 102, lines 63-69.

"...converting, in response to the file access data structure..." at col. 247, lines 5-8 and col. 60, lines 1-3.

"...not being a critical path data structure..." at col. 189, lines 40-42, col. 172, lines 60-61, and col. 60, lines 1-3.

"...a header of the file access data structure..." at col. 75, lines 7-9 and col. 60, lines 1-3.

"...using a second set of specific code functions..." at col. 102, lines 102, lines 63-69.

"...of the file access data structure..." at col. 60, lines 1-3.

Bowman-Amuth does not teach the use of elements of endiannesses and byte swapping.

13. However, Lee teaches the use of elements of endiannesses and byte swapping as follows:

"...the elements from the first endianness to the second endianness..." at col. 5, lines 44-46.

"...from the first endianness to the second endianness..." at col. 5, lines 44-46.

"...and calling a byte swapping engine to convert selected elements..." at col. 5, lines 63-67.

"...from the first byte order to the second byte order..." at col. 4, lines 49-54.

It would have been obvious to one of ordinary skill at the time of the invention to combine Lee with Bowman-Amuth to provide elements of endianesses and byte swapping in order to be able to convert the data structures between big-endian and little-endian formats to gain compatibility between computer systems using these data formats and gain acceptance of the system. Bowman-Amuth and Lee teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the use of elements, the ordering of data, and the conversion of data. Bowman-Amuth provides data structures, headers, and functions and Lee provides elements of endianesses and byte swapping.

For claims 2 and 15, the term "unimportant" is used to suggest the term "non-critical".

14. As per independent claim 11, the "...byte swapping engine..." is taught by Lee at col. 5, lines 63-67,  
the "...byte swapping engine..." is taught by Lee at col. 5, lines 63-67,  
the "...performing a defined operation..." is taught by Bowman-Amuth at col. 119, lines 24-26,  
and the "...on each of a plurality of elements of a file access data structure..." is taught by Bowman-Amuth at col. 41, lines 65-67 and col. 60, lines 1-3.

15. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth and Lee as applied to claim 2 above, and further in view of Keele et al. (U.S. Patent No. 5,438,674).

As per claim 3, the "...file access data structure..." is taught by Bowman-Amuth at col. 60, lines 1-3,  
the "...file access data structure..." is taught by Bowman-Amuth at col. 60, lines 1-3,  
but the "...further comprises a direct access..." is not taught by either Bowman-Amuth or Lee.

However Keele teaches the use of direct access storage devices as follows:

"...The current IBM System 370 storage hierarchy consists of main memory, disk memory or Direct Access Storage Devices (DASD), reel and cartridge magnetic tapes, and hardcopy such as paper and microfilm..." at col. 15, lines 6-9.

It would have been obvious to one of ordinary skill at the time of the invention to combine Keele with Bowman-Amuth and Lee to provide direct access to storage devices in order to have the data on these devices available at all times for on-line processing. Bowman-Amuth, Lee, and Keele teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the ordering of data, and the conversion of data and Bowman-Amuth and Keele teach the use of directories and the use of files. Bowman-Amuth provides data structures, headers, and functions, Lee provides elements of endianesses and byte swapping, and Keele provides direct access to storage devices.

16. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth and Lee as applied to claim 11 above, and further in view of McCarthy et al. (U.S. Patent No. 6,321,310).

As per claim 12, the "...file server..." is taught by Bowman-Amuth at col. 60, lines 4-5,

the "...each of the plurality of entries..." is taught by Bowman-Amuth at col. 259, lines 4-6,

the "...associated with a specific file access data structure..." is taught by Bowman-Amuth at col. 60, lines 1-3,

but the "...further comprises a descriptor look up table..."

and the "...descriptor look up table having a plurality of entries..." are not taught by either Bowman-Amuth or Lee.

However, McCarthy teaches the use of descriptor tables as follows:

"...Memory Access Table (MAT) 65 will now be described with reference to FIG. 4. This is a memory descriptor table holding information relating to main memory locations involved in burst transactions..." at col. 15, lines 60-63.

It would have been obvious to one of ordinary skill at the time of the invention to combine McCarthy with Bowman-Amuth and Lee to provide descriptor tables in order to hold information relating to main memory locations to provide parameters for reformatting data in those locations. Bowman-Amuth, Lee, and McCarthy teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the use of elements, the ordering of data, and the conversion of data. Bowman-Amuth provides file access data structures, Lee provides byte swapping, and McCarthy provides descriptor tables.

17. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth, Lee, and McCarthy as applied to claim 11 above, and further in view of Favor (U.S. Patent No. 5,926,642).

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As per claim 13, the "...each of the plurality of entries further comprises a plurality of elements...", is taught by Bowman-Amuth at col. 259, lines 4-6 and col. 41, lines 65-67,

the "...each of the elements...", is taught by Bowman-Amuth at col. 41, lines 65-67,

the "...having a size field...", is taught by McCarthy at col. 17, lines 7-12,

but the "...and an operation field...", is not taught by either Bowman-Amuth. Lee, or McCarthy.

However, Favor teaches the use of operation fields as follows:

"...FIG. 6A is a register operation (RegOp) field encoding graphic that illustrates various fields in the RegOp format..." at col. 35, lines 44-45.

It would have been obvious to one of ordinary skill at the time of the invention to combine Favor with Bowman-Amuth, Lee, and McCarthy to provide operation fields in order to provide information related to designating the operation for reformatting data and provide a quickly accessible means of controlling the conversion of data. Bowman-Amuth, Lee, McCarthy, and Favor teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the ordering of data, and the conversion of data and Bowman-Amuth. Bowman-Amuth provides file access data structures, Lee provides byte swapping, and McCarthy provides descriptor tables, and Favor provides operation fields.

18. As per claim 14, the "...defined operation...", is taught by Bowman-Amuth at col. 119, lines 24-26,

the "...is defined by the operation field...", is taught by Favor at col. 35, lines 44-45,

and the "...of the entry associated with the file access data structure..." is taught by Bowman-Amuth at col. 259, lines 4-6 and col. 60, lines 1-3.

19. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth (U.S. Patent No. 6,434,568), Lee et al. (U.S. Patent No. 5,867,690) and McCarthy et al. (U.S. Patent No. 6,321,310).

20. Bowman-Amuth renders obvious independent claim 4 by the following:  
"...storing the file access data structure to be converted..." at col. 49, lines 57-61, col. 60, lines 1-3, and col. 247, lines 5-8.  
"...placing the file access data structure..." at col. 60, lines 1-3.

Bowman-Amuth does not teach the use of a byte swapping engine, descriptor tables, and input and output buffers.

21. However, Lee teaches the use of a byte swapping engine as follows:  
"...a byte swapping engine..." at col. 5, lines 63-67.  
"...byte swapping engine operative..." at col. 5, lines 63-67,  
"...byte swapping engine..." at col. 5, lines 63-67.

It would have been obvious to one of ordinary skill at the time of the invention to combine Lee with Bowman-Amuth to provide byte swapping in order to be able to convert the data structures between big-endian and little-endian formats to gain compatibility between computer systems using these data formats and gain acceptance of the system. Bowman-Amuth and Lee teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the use of elements,

the ordering of data, and the conversion of data. Bowman-Amuth provides file access data structures and Lee provides byte swapping.

Lee does not teach the use of descriptor tables and input and output buffers.

22. However, McCarthy teaches the use of descriptor tables and input and output buffers as follows:

"...input buffer..." at col. 5, lines 16-21.

"...input buffer..." at col. 5, lines 16-21.

"...interconnected with a descriptor table..." at col. 15, lines 60-63.

"...and an output buffer..." at col. 5, lines 16-21.

"...in the output buffer after conversion..." at col. 5, lines 16-21.

It would have been obvious to one of ordinary skill at the time of the invention to combine McCarthy with Bowman-Amuth and Lee to provide descriptor tables in order to hold information relating to main memory locations to provide parameters for reformatting data in those locations. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine McCarthy with Bowman-Amuth and Lee to provide input and output buffers in order to provide for the continuous processing of data streams. Bowman-Amuth, Lee, and McCarthy teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the use of elements, the ordering of data, and the conversion of data. Bowman-Amuth provides file access data structures, Lee provides byte swapping, and McCarthy provides descriptor tables and input and output buffers.

23. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth, Lee, and McCarthy as applied to claim 4 above, and further in view of Favor (U.S. Patent No. 5,926,642).

As per claim 5, the "...descriptor table...", is taught by McCarthy at col. 15, lines 60-63,

the "...further comprises a set of entries describing various file access data structures...", is taught by Bowman-Amuth at col. 259, lines 4-6 and col. 60, lines 1-3, the "...each entry further comprising a size field...", is taught by McCarthy at col. 17, lines 7-12,

but the "...and an operation field...", is not taught by either Bowman-Amuth, Lee, or McCarthy.

However, Favor teaches the use of operation fields as follows:

"...FIG. 6A is a register operation (RegOp) field encoding graphic that illustrates various fields in the RegOp format..." at col. 35, lines 44-45.

It would have been obvious to one of ordinary skill at the time of the invention to combine Favor with Bowman-Amuth, Lee, and McCarthy to provide operation fields in order to provide information related to designating the operation for reformatting data and provide a quickly accessible means of controlling the conversion of data. Bowman-Amuth, Lee, McCarthy, and Favor teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the ordering of data, and the conversion of data and Bowman-Amuth. Bowman-Amuth provides data structures, headers, and functions, Lee provides elements of endianesses and byte swapping,

McCarthy provides descriptor tables and input and output buffers, and Favor provides operation fields.

24. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth, Lee, and McCarthy as applied to claim 4 above, and further in view of Keele.

As per claim 6, the "...file access data structure..." is taught by Bowman-Amuth at col. 60, lines 1-3,  
the "...file access data structure..." is taught by Bowman-Amuth at col. 60, lines 1-3,  
but the "...further comprises a direct access..." is not taught by either Bowman-Amuth, Lee, or McCarthy.

However Keele teaches the use of direct access storage devices as follows:

"...The current IBM System 370 storage hierarchy consists of main memory, disk memory or Direct Access Storage Devices (DASD), reel and cartridge magnetic tapes, and hardcopy such as paper and microfilm..." at col. 15, lines 6-9.

It would have been obvious to one of ordinary skill at the time of the invention to combine Keele with Bowman-Amuth, Lee, and McCarthy to provide direct access to storage devices in order to have the data on these devices available at all times for on-line processing. Bowman-Amuth, Lee, McCarthy, and Keele teach related systems. They teach the use of computers, the use of data structures, the use of bytes, the ordering of data, and the conversion of data and Bowman-Amuth. Bowman-Amuth provides data structures, headers, and functions, Lee provides elements of endianesses and byte swapping, McCarthy provides descriptor tables and input and output buffers, and Keele provides direct access to storage devices.

25. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah (U.S. Patent No. 6,434,568) and McCarthy et al. (U.S. Patent No. 6,321,310).

Bowman-Amuth renders obvious independent claim 7 by the following:

"...performing an action on an element of the data structure..." at col. 280, lines 28-31, col. 41, lines 65-67, and col. 215, lines 12-15.

"...the action being defined..." at col. 119, lines 24-26.

Bowman-Amuth does not teach the use of descriptor tables and output buffers.

26. However McCarthy teaches the use of descriptor tables and output buffers as follows:

"...reading an element entry from a descriptor table..." at col. 7, lines 8-10 and col. 15, lines 60-63.

"...in the element entry read from the descriptor table..." at col. 7, lines 8-10 and col. 15, lines 60-63.

"...and placing the element in an output buffer..." at col. 2, lines 46-55 and col. 5, lines 16-21.

It would have been obvious to one of ordinary skill at the time of the invention to combine McCarthy with Bowman-Amuth to provide descriptor tables in order to hold information relating to main memory locations to provide parameters for reformatting data in those locations. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine McCarthy with Bowman-Amuth to provide output buffers in order to provide for the continuous processing of data streams. Bowman-

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Amuth and McCarthy teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the use of elements, the ordering of data, and the conversion of data. Bowman-Amuth provides performing actions on elements of data structures and McCarthy provides descriptor tables and output buffers.

27. As per claim 8, the "...step of performing an action on an element..." is taught by Bowman-Amuth at col. 280, lines 28-31 and col. 41, lines 65-67 and the "...further comprises the step of copying the element from an input buffer to the output buffer..." is taught by McCarthy at col. 2, lines 46-55 and col. 5, lines 16-21.

28. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth and McCarthy as applied to claim 7 above, and further in view of Lee.

As per claim 19, the "...step of performing an action on an element..." is taught by Bowman-Amuth at col. 280, lines 28-31 and col. 41, lines 65-67, but the "...further comprises the step of byte swapping the element..." is not taught by either Bowman-Amuth or McCarthy.

However, Lee teaches the use of byte swapping as follows:

"...As the processor 510 reads data from the storage device 520 the data passes from the storage device 520 along the system data bus 550 to the byte swapping device 530. The byte swapping device 530 receives the data from the system data bus 550 and selectively byte swaps the data..." at col. 5, lines 63-67.

It would have been obvious to one of ordinary skill at the time of the invention to combine Lee with Bowman-Amuth and McCarthy to provide byte swapping in order to be able to convert the data structures between big-endian and little-endian formats to

gain compatibility between computer systems using these data formats and gain acceptance of the system. Bowman-Amuth, McCarthy, and Lee teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the use of elements, the ordering of data, and the conversion of data. Bowman-Amuth provides performing actions on elements of data structures, McCarthy provides descriptor tables and output buffers, and Lee provides byte swapping.

29. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth and McCarthy as applied to claim 7 above, and further in view of Favor.

As per claim 10, the "...element entry of the descriptor table further comprises a field describing a size of the element..." is taught by McCarthy at col. 17, lines 2-12, but the "...and a field describing an action to be performed..." is not taught by either Bowman-Amuth or McCarthy.

However, Favor teaches the use of operation fields as follows:

"...FIG. 6A is a register operation (RegOp) field encoding graphic that illustrates various fields in the RegOp format..." at col. 35, lines 44-45.

It would have been obvious to one of ordinary skill at the time of the invention to combine Favor with Bowman-Amuth and McCarthy to provide operation fields in order to provide information related to designating the operation for reformatting data and provide a quickly accessible means of controlling the conversion of data. Bowman-Amuth, McCarthy, and Favor teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the ordering of data, and the conversion of data and Bowman-Amuth. Bowman-Amuth provides performing actions

on elements of data structures, McCarthy provides descriptor tables and output buffers, and Favor provides operation fields.

30. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuth as applied to claim 16 above, and further in view of Lee.

As per claim 19, the "...second processing path..." is taught by Bowman-Amuth at col. 258, lines 20-22 and col. 112, lines 64-67, but the "...further comprises a byte swapping engine..." is not taught by Bowman-Amuth.

However, Lee teaches the use of byte swapping as follows:

"...As the processor 510 reads data from the storage device 520 the data passes from the storage device 520 along the system data bus 550 to the byte swapping device 530. The byte swapping device 530 receives the data from the system data bus 550 and selectively byte swaps the data..." at col. 5, lines 63-67.

It would have been obvious to one of ordinary skill at the time of the invention to combine Lee with Bowman-Amuth to provide byte swapping in order to be able to convert the data structures between big-endian and little-endian formats to gain compatibility between computer systems using these data formats and gain acceptance of the system. Bowman-Amuth and Lee teach the use of related systems. They teach the use of computers, the use of data structures, the use of bytes, the use of elements, the ordering of data, and the conversion of data. Bowman-Amuth provides file access data structures and performing actions on elements of data structures and Lee provides byte swapping.

31. Claims 20, 26, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (U.S. Patent No. 6,282,537) and Lee et al. (U.S. Patent No. 5,867,690).

32. Madnick renders obvious independent claims 20 and 26 by the following:

“...providing a file access data structure...” at col. 12, lines 63-65.

“...providing a descriptor look up table...” at col. 10, lines 7-12.

“...identifying, from the descriptor look up table, a series of actions to perform on elements...” at col. 4, lines 60-63 and col. 10, lines 7-12.

“...of the file access data structure...” at col. 12, lines 63-65.

“...of the file access data structure...” at col. 12, lines 63-65.

“...and a performing the identified series of actions on the elements...” at col. 10, lines 7-12.

“...of the file access data structure...” at col. 12, lines 63-65.

Madnick does not teach the use of elements of endiannesses and byte swapping.

33. However, Lee teaches the use of endiannesses and byte swapping as follows:

“...calling a byte-swapping engine...” at col. 9, lines 43-46 and col. 5, lines 63-67.

“...as input to the byte-swapping engine...” at col. 7, lines 55-57 and col. 5, lines 63-67.

“...to the byte-swapping engine...” at col. 5, lines 63-67.

“...in order to swap bytes...” at col. 5, lines 63-67.

“...from a first endianness to a second endianness...” at col. 5, lines 44-46.

It would have been obvious to one of ordinary skill at the time of the invention to combine Lee with Madnick to provide endianesses and byte swapping in order to be able to convert the data structures between big-endian and little-endian formats to gain compatibility between computer systems using these data formats and gain acceptance of the system. Madnick and Lee teach the use of related systems. They teach the use of computers, the use of data structures, the use of elements, the ordering of data, and the conversion of data. Madnick provides file access, data structures, descriptor look up, and performs actions on elements and Lee provides endianesses and byte swapping.

34. As per independent claims 32 and 33, the "...said computer readable media containing instructions for execution on a processor...", is taught by Lee at col. 4, lines 40-48,  
the "...for the practice of a method for converting a data structure...", is taught by Lee at col. 10, lines 40-44,  
the "...method having the steps of, calling a byte-swapping engine...", is taught by Lee at col. 9, lines 43-46 and col. 5, lines 63-67,  
the "...providing a file access data structure...", is taught by Madnick at col. 12, lines 63-65,  
the "...as input to the byte-swapping engine...", is taught by Lee at col. 7, lines 55-57 and col. 5, lines 63-67,  
the "...providing a descriptor look up table...", is taught by Madnick at col. 10, lines 7-12,  
the "...to the byte-swapping engine..." is taught by Madnick at col. 12, lines 63-65,

the "...identifying, from the descriptor look up table, a series of actions to perform on elements...", is taught by Madnick at col. 4, lines 60-63 and col. 10, lines 7-12,  
the "...of the file access data structure...", is taught by Madnick at col. 12, lines 63-65,  
the "...in order to swap bytes...", is taught by Lee at col. 12, lines 63-65,  
the "...of the file access data structure...", is taught by Madnick at col. 12, lines 63-65,  
the "...from a first endianness to a second endianness...", is taught by Lee at col. 5, lines 44-46,  
the "...and performing the identified series of actions on the elements...", is taught by Madnick at col. 10, lines 7-12,  
and the "...of the file access data structure...", is taught by Madnick at col. 12, lines 63-65.

35. As per claims 24 and 30, the "...swapping bytes of the data structure as needed...", is taught by Lee at col. 12, lines 63-65, col. 3, lines 13-16, and col. 10, lines 30-31,  
the "...in response to swapping bytes...", is taught by Lee at col. 4, lines 44-48 and col. 12, lines 63-65,  
and the "...of the file access data structure...", is taught by Madnick at col. 12, lines 63-65.

36. Claims 21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick and Lee as applied to claim 2 above, and further in view of Chow et al. (U.S. Patent No. 6,745,310).

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As per claims 21 and 27, the "...using as the file access data structure a file....," is taught by Madnick at col. 12, lines 63-65, but the "...having Direct Access File System (DAFS) protocol....," is not taught by either Madnick or Lee.

However, Chow teaches the use of Direct Access File Structure protocol as follows:

"...Examples of network interface standards that can be used include gigabit Ethernet, ten gigabit Ethernet, Fibre Channel-Arbitrated Loop (FC-AL), Firewire, Small Computer System Interface (SCSI), Advanced Technology Attachment (ATA), InfiniBand, HyperTransport, PCI-X, Direct Access File System (DAFS), IEEE 803.11, or Wireless Application Protocol (WAP)..." at col. 7, lines 1-7.

It would have been obvious to one of ordinary skill at the time of the invention to combine Chow with Madnick and Lee to provide Direct Access File Structure protocol in order to use a common network interface standard and gain acceptance of the system. Madnick, Lee, and Chow teach the use of related systems. They teach the use of computers, the use of data structures, the ordering of data, and the conversion of data. Madnick provides file access, data structures, descriptor look up, and performs actions on elements, Lee provides endiannesses and byte swapping, and Chow provides Direct Access File Structure protocol.

37. Claims 22, 23, 25, 28, 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick and Lee as applied to claim 2 above, and further in view of Bowman-Amuth,

As per claims 22 and 28, the "...determining if the file access data structure..." is taught by Madnick at col. 12, lines 63-65,  
the "...and if it is, perform byte swap operations..." is taught by Lee at col. 12, lines 63-65,  
but the "...is a critical path data structure..."  
and the "...using specific code functions..." are not taught by either Madnick or Lee.

However Bowman-Amuth teaches the use of critical paths and specific code functions as follows:

"...For example, if ad hoc reporting queries or data warehousing applications can work with a replica of the transaction database, these resource intensive applications will not interfere with mission critical transaction processing..." at col. 50, lines 52-56.

"...utilize flexible, messaging between components that creates a larger number of potential test execution paths..." at col. 172, lines 60-61.

"...And the overhead of message sends compared to function calls can be unimportant compared to the application I/O. That is, most applications are I/O bound, not compute bound..." at col. 189, lines 40-43.

It would have been obvious to one of ordinary skill at the time of the invention to combine Bowman-Amuth with Madnick and Lee to provide critical paths in order to identify a sequential series of tasks that is required for optimal performance of a system. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Bowman-Amuth with Madnick and Lee to provide specific code functions in order to perform the necessary processing to handle the input/output of a system and support more rapid system processing. Madnick, Lee, and Bowman-Amuth teach the

use of related systems. They teach the use of computers, the use of data structures, the use of elements, the ordering of data, and the conversion of data and Lee and Bowman-Amuth teach the use of bytes. Madnick provides file access, data structures, descriptor look up, and performs actions on elements, Lee provides endianesses and byte swapping, and Bowman-Amuth provides critical paths and specific code functions.

38. As per claims 23 and 29, the "...determining if the file access data structure...", is taught by Madnick at col. 12, lines 63-65, the "...is a critical path data structure...", is taught by Bowman-Amuth at col. 50, lines 52-57, col. 172, lines 60-61, and col. 60, lines 1-3, the "...and if it is not, perform byte swap operations...", is taught by Lee at col. 12, lines 63-65, and the "...on a data structure header...", is taught by Bowman-Amuth at col. 60, lines 1-3 and col. 75, lines 7-9.

39. As per claims 25 and 31, the "...determining if an element entry of the descriptor look up table...", is taught by Madnick at col. 5, lines 19-25 and col. Col. 10, lines 7-11, the "...is nested...", is taught by Bowman-Amuth at col. 280, lines 11-12, the "...branching to the nested entry...", is taught by Bowman-Amuth at col. 297, lines 19-20, col. 280, lines 11-12, and col. 259, lines 4-6, the "...identifying, from the descriptor look up table, a series of actions to perform on elements...", is taught by Madnick at col. 4, lines 60-63 and col. 10, lines 7-12,

the "...of the nested entry...", is taught by Bowman-Amuth at col. 280, lines 11-12 and col. 259, lines 4-6,

and the "...in order to swap bytes of the entry from a first endianness to a second endianness...", is taught by Lee at col. 5, lines 63-67, col. 9, lines 8-9, and col. 5, lines 44-46.

For claims 25 and 31, the terms "part" and "data element" are used to suggest the term "entry" and the term "going to" is used to suggest the term "branching to"

### ***Response to Arguments***

40. Applicant's arguments filed 30 March 2005 have been fully considered but they are not persuasive. In the first argument for independent claim 1 on page 15, paragraphs 3-5 and page 16, paragraph 1, the Applicant states:

*"Applicant respectfully urges that Madnick has no disclosure of Applicant's claimed novel identifying, from a descriptor look up table, a series of actions to perform on elements of the file access data structure; and performing the identified series of actions on the elements of the file access data structure.*

In particular, Madnick has no disclosure of a *descriptor look up table*. A descriptor look up table is defined in Applicant's Specification as related to a file access data structure.

The Examiner disagrees. Madnick teaches this limitation as follows:

"...For example, the data contexts 108-118 may be stored as a directory of URL (Uniform Resource Locator) addresses which **identify** the location of each data context 108-118..." at col. 4, lines 60-63.

"...Each **descriptor file** contains information about the registered data source 104, including an export schema which defines what data **elements** are available from the source, a specification file which describes the **actions** needed to be **performed** in order to retrieve data values from the site, and an address for the actual source of the data, such as an URL..."

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"...The wrapper generator 614 uses the specification **file** declared by each the semi-**structured data** source 104 in order to **access** it..." at col. 12, lines 63-65.

The combination of these three references teaches the above limitations. In particular, Madnick teaches the use of a descriptor file, which has all the functionality claimed in the limitation of claim 1 for a descriptor look up table. Madnick's descriptor file clearly anticipates the descriptor look up table used in claim 1.

41. In the second argument for independent claim 1 on page 17, paragraphs 1-4, the Applicant states:

"Applicant respectfully urges that Applicant's claimed *identifying, from a descriptor look up table, a series of actions to perform on elements of the file access data structure; and performing the identified series of actions on the elements of the file access data structure*, is totally absent from the disclosure of Madnick. That is, Madnick analyzes semi-structured documents to obtain data from them, where in sharp contrast, Applicant claims using a *descriptor look up table* to analyze Applicant's *file access data structure*, and ultimately to perform byte swapping on Applicant's *file access data structure*. Therefore, Applicant respectfully urges that Madnick is legally precluded from anticipating Applicant's claimed invention under 35 U.S.C. § 102 because of the absence from the disclosure of Applicant's claimed novel *identifying, from a descriptor look up table, a series of actions to perform on elements of the file access data structure; and performing the identified series of actions on the elements of the file access data structure*.

The Examiner disagrees. The second argument is a restatement of the first argument.

As such, the response to the first argument also applies to the second argument.

42. In the third argument for independent claim 1 on page 17, paragraphs 5-6 and page 18, paragraph 1, the Applicant states:

"Further, Applicant's claimed invention is for "converting a file access data structure from a first endianness to a second endianness". Applicant further respectfully urges that Madnick has no disclosure of converting the endianness of a file from one form to another, as claimed by Applicant. That is,

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Applicant respectfully urges that the absence from Madnick of any mention of the endianness used in a file access data structure precludes Madnick from anticipating Applicant's claimed invention under 35 U.S.C. § 102 (e)."

The Examiner disagrees. In response to applicant's arguments, the recitation

"converting the endianness of a file from one form to another" has not been given

patentable weight because the recitation occurs in the preamble. A preamble is

generally not accorded any patentable weight where it merely recites the purpose of a

process or the intended use of a structure, and where the body of the claim does not

depend on the preamble for completeness but, instead, the process steps or structural

limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA

1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

43. In the fourth argument for independent claim 16 on page 19, paragraphs 2-6 and page 18, paragraph 1, the Applicant states:

"Applicant respectfully urges that Bowman-Amuah has no disclosure of translating a first endianness to a second endianness in movement of data between systems. In particular, Applicant respectfully urges that Bowman-Amuah has no disclosure of Applicant's claimed novel:

*determining a type of the file access data structure;*

*processing, in response to the file access data structure of being of a first type, the file access data structure along a first processing path;*

*processing, in response to the file access data structure being of a second type, the file access data structure along a second processing path.*

Bowman-Amuah simply uses his object to perform communication between his client, using a new format, and a legacy system. Applicant, as set out in representative claim 16, first does *determining a type of the file access data structure*, and after doing the determining step, *processing, in response to the file access data structure of being of a first type, the file access data structure, along a first processing path* and alternatively, if the determining step finds the file access data structure to be of a second type, *processing, in response to the file access data structure being of a second type, the file access data structure along a second processing path.*

The Examiner disagrees. In response to applicant's arguments, the recitation "translating a first endianness to a second endianness in movement of data between systems" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Bowman-Amuth teaches the limitations of independent claim 16 as follows:

"...The identification function **determines** general information about the request, such as report **type**, requester, quantity to be printed, and requested time. Based on the report type, a table of reports is examined in order to gather additional report-specific information and perform required validation routines for the report request..." at col. 112, lines 64-67.

"...Integrated file directory--a logical directory **structure** that combines all **accessible file** directories, regardless of the physical directory **structure**..." at col. 60, lines 1-3.

"...In this case, the **processing** involves simple validation (format and "is null" checking)..." at col. 258, lines 20-22.

"...Also, data from the database may be returned **in response to** the request..." at col. 228, lines 5-6.

"...utilize flexible, messaging between components that creates a larger number of potential test **execution paths**..." at col. 172, lines 60-61.

A combination of the first two references teaches the first limitation, "determining a type of the file access data structure". Combinations of all five references teach the second

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and third limitations, "processing, in response to the file access data structure of being of a first type, the file access data structure along a first processing path" and "processing, in response to the file access data structure being of a second type, the file access data structure along a second processing path".

44. In the fifth argument for claims 2, 11, and 15 on page 21, paragraph 3, the Applicant states:

"Applicant respectfully urges that Lee has no disclosure of Applicant's claimed novel determining if the "file access data structure" is a critical path data structure."

The Examiner disagrees. This limitation is taught by a combination of teachings from Bowman-Amuth. Bowman-Amuth teaches the "file access data structure" at col. 60, lines 1-3 and the "is a critical path data structure" at col. 50, lines 52-57, col. 172, lines 60-61, and col. 60, lines 1-3. There is no requirement that Lee teach this limitation since claims 2, 11, and 15 are rendered obvious by Bowman-Amuth.

45. In the sixth argument for independent claims 2, 11, and 15 on page 23, paragraphs 1-4, the Applicant states:

"Accordingly, Applicant respectfully urges that Lee has no disclosure of Applicant's claimed novel:

converting, in response to the file access data structure *being a critical path data structure, the elements from the first endianness to the second endianness using a set of specific code functions;*

converting, in response to the file access data structure not being a critical path data structure, *a header of the file access data structure from the first endianness to the second endianness using a second set of specific code functions; and calling a byte swapping engine to, convert selected elements of the file access data structure from the first byte order to the second byte order.*

The Examiner disagrees. These limitations are taught by combinations of teachings from the Bowman-Amuth and Lee references. For the first limitation, Bowman-Amuth

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teaches "being a critical path data structure" at col. 50, lines 52-57, col. 172, lines 60-61, and col. 60, lines 1-3 and "using a set of specific code functions" at col. 102, lines 63-69 and Lee teaches "the elements from the first endianness to the second endianness" at col. 5, lines 44-46. For the second limitation, Bowman-Amuth teaches "a header of the file access data structure" at col. 75, lines 7-9 and col. 60, lines 1-3 and "using a second set of specific code functions" at col. 102, lines 102, lines 63-69 and Lee teaches "from the first endianness to the second endianness" at col. 5, lines 44-46. For the third limitation, Bowman-Amuth teaches "of the file access data structure" at col. 60, lines 1-3 and Lee teaches "and calling a byte swapping engine to convert selected elements" at col. 5, lines 63-67 and "from the first byte order to the second byte order" at col. 4, lines 49-54.

46. In the seventh argument for independent claims 2, 11, and 15 on page 23, paragraph 6 and page 24 paragraphs 1-3, the Applicant states:

Accordingly Applicant respectfully urges that Lee and Bowman-Amuah, taken either singly or in combination, are legally precluded from rendering the presently claimed invention obvious under 35 U.S.C. § 103 because of the absence from both of Applicant's claimed novel:

converting, in response to the file access data structure *being a critical path data structure, the elements from the first endianness to the second endianness using a set of specific code functions;*

converting, in response to the file access data structure not being a critical path data structure, *a header of the file access data structure from the first endianness to the second endianness using a second set of specific code functions;* and  
*calling a byte swapping engine to convert selected elements of the file access data structure from the first byte order to the second byte order.*

The Examiner disagrees. The seventh argument is simply a restatement of the sixth argument. As such, the response to the sixth argument applies to the seventh argument.

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47. In the eighth argument for claim 3 on page 23, paragraph 2, the Applicant states:

"Applicant respectfully notes that claim 3 is dependent, and is dependent from an independent claim which is believed to be in condition for allowance. Accordingly, Claim 3 is believed to be in condition for allowance."

The Examiner disagrees. Since the responses to the fifth through the seventh arguments have shown that independent claim 2 is rendered obvious, claim 3 is dependent upon claim 2, and no additional arguments have been provided for claim 3 then claim 3 is still rendered obvious.

48. In the ninth argument for independent claim 15 on page 26, paragraph 3, the Applicant states:

"Applicant respectfully urges that McCarthy has no disclosure of Applicant's claimed use of different processing paths depending upon whether the file data structure is a critical path data structure."

The Examiner disagrees. Bowman-Amuth teaches this limitation at col. 50, lines 52-57, col. 172, lines 60-61, and col. 60, lines 1-3. Since Bowman-Amuth has already taught this limitation there is no further requirement that McCarthy also teach this limitation.

49. In the tenth argument for independent claim 15 on page 26, paragraphs 5-6 and page 27, paragraphs 1-2, the Applicant states:

"Accordingly Applicant respectfully urges that Lee and Bowman-Amuah, and McCarthy taken either singly or in combination, are legally precluded from rendering the presently claimed invention obvious under 35 U.S.C. § 103 because of the absence from both of Applicant's claimed novel:

converting, in response to the file access data structure *being a critical path data structure, the elements from the first endianness to the second endianness using a set of specific code functions;*

converting, in response to the file access data structure not being a critical path data structure, *a header of the file access data structure from the first endianness to the second endianness using a second set of specific code functions;* and

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*calling a byte swapping engine to convert selected elements of the file access data structure from the first byte order to the second byte order.*

The Examiner disagrees. The tenth argument is simply a restatement of the sixth argument. As such, the response to the sixth argument applies to the tenth argument.

50. In the eleventh argument for claims 13 and 14 on page 27, paragraph 4, the Applicant states:

"Applicant respectfully notes that claims 13 and 14 are dependent, and are each dependent from an independent claim which is believed to be in condition for allowance."

The Examiner disagrees. Since the responses to the fifth through the seventh arguments have shown that independent claim 11 is rendered obvious, claims 13 and 14 are dependent upon claim 11, and no additional arguments have been provided for either of claims 13 or 14 then claims 13 and 14 are still rendered obvious.

51. In the twelfth argument for independent claim 4 on page 28, paragraphs 2-4, the Applicant states:

"Applicant respectfully urges that Bowman-Amuah, Lee, and McCarthy all have no disclosure of Applicant's claimed novel use of *a byte swapping engine, the byte swapping engine operative interconnected with a descriptor table*. That is, neither Bowman-Amuah, Lee, nor McCarthy have any disclosure of *a byte swapping engine that is interconnected with a descriptor table*. Accordingly, Applicant respectfully urges that Bowman-Amuah, Lee, and McCarthy, taken either singly or in any combination, are legally precluded from rendering the presently claimed invention obvious under 35 U.S.C. § 103 because of the absence from each of Applicant's claimed novel use of *a byte swapping engine, the byte swapping engine operative interconnected with a descriptor table*."

The Examiner disagrees. This limitation is taught by a combination of Lee and McCarthy. Lee teaches "a byte swapping engine" at col. 5, lines 63-67 and "byte

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swapping engine operative" at col. 5, lines 63-67 and McCartly teaches "interconnected with a descriptor table" at col. 15, lines 60-63.

52. In the thirteenth argument for claim 5 on page 29, paragraph 1, the Applicant states:

"Applicant respectfully notes that claim 5 is dependent, and is dependent from an independent claim which is believed to be in condition for allowance. Accordingly, Claim 5 is believed to be in condition for allowance."

The Examiner disagrees. Since the responses to the twelfth argument has shown that independent claim 4 is rendered obvious, claim 5 is dependent upon claim 4, and no additional arguments have been provided claim 5 then claim 5 is still rendered obvious.

53. In the fourteenth argument for claim 6 on page 29, paragraph 3, the Applicant states:

"Applicant respectfully notes that claim 6 is dependent, and is dependent from an independent claim which is believed to be; in condition for allowance. Accordingly, Claim 6 is believed to be in condition for allowance.

The Examiner disagrees. Since the responses to the twelfth argument has shown that independent claim 4 is rendered obvious, claim 6 is dependent upon claim 4, and no additional arguments have been provided claim 6 then claim 6 is still rendered obvious.

54. In the fifteenth argument for independent claim 7 on page 30, paragraphs 1-2, the Applicant states:

"Applicant respectfully urges that Bowman-Amuah and McCarthy each have no disclosure of Applicant's claimed novel *reading an element entry from a descriptor table; performing an action on an element of the data structure, the action being defined in the element entry read from the descriptor table.*

The Examiner disagrees. McCarthy teaches the first limitation, "reading an element entry from a descriptor table" at col. 7, lines 8-10 and col. 15, lines 60-63. A combination

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of the Bowman-Amuah and McCarthy teaches the second limitation. Bowman-Amuth teaches "performing an action on an element of the data structure" at col. 280, lines 28-31, col. 41, lines 65-67, and col. 215, lines 12-15 and "the action being defined" at col. 119, lines 24-26 and McCarthy teaches "in the element entry read from the descriptor table" at col. 7, lines 8-10 and col. 15, lines 60-63.

55. In the sixteenth argument for independent claim 7 on page 30, paragraph 4, the Applicant states:

"That is, Bowman-Amuah has no disclosure of Applicant's claimed novel use of a *descriptor table* in performing byte swapping."

The Examiner disagrees. In response to applicant's arguments, the recitation "in performing byte swapping" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). McCarthy teaches the use of a descriptor table at col. 15, lines 60-63.

56. In the seventeenth argument for independent claim 7 on page 31, paragraphs 1-3, the Applicant states:

"Accordingly, McCarthy has no disclosure of Applicant's claimed novel use of a descriptor table in performing byte swapping. Therefore, Applicant respectfully urges that Bowman-Amuah and McCarthy, taken either singly or in combination, are legally precluded from rendering the presently claimed invention obvious under 35 U.S. C. § 103 because of the absence from both of

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Applicant's claimed novel *reading an element entry from a descriptor table; performing an action on an element of the data structure, the action being defined in the element entry read from the descriptor table.*"

The Examiner disagrees. In response to applicant's arguments, the recitation "in performing byte swapping" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). McCarthy teaches the use of a descriptor table at col. 15, lines 60-63. The remainder of the seventh argument is essentially a restatement of the fifteenth argument. As such, the response to the fifteenth argument is appropriate for this portion of the seventh argument.

57. In the eighteenth argument for claim 9 on page 32, paragraph 2, the Applicant states:

"Applicant respectfully notes that claim 9 is dependent, and is dependent from an independent claim which is believed to be in condition for allowance. Accordingly, Claim 9 is believed to be in condition for allowance."

The Examiner disagrees. Since the responses to the fifteenth through the seventeenth arguments have shown that independent claim 7 is rendered obvious, claim 9 is dependent upon claim 7, and no additional arguments have been provided claim 9 then claim 9 is still rendered obvious.

58. In the nineteenth argument for claim 10 on page 32, paragraph 4, the Applicant states:

"Applicant respectfully notes that claim 10 is dependent, and is dependent from an independent claim which is believed to be in condition for allowance. Accordingly, Claim 10 is believed to be in condition for allowance.

The Examiner disagrees. Since the responses to the fifteenth through the seventeenth arguments have shown that independent claim 7 is rendered obvious, claim 10 is dependent upon claim 7, and no additional arguments have been provided claim 10 then claim 10 is still rendered obvious.

59. In the twentieth argument for claim 19 on page 32, paragraph 6, the Applicant states:

"Applicant respectfully notes that claim 19 is dependent, and is dependent from an independent claim which is believed to be in condition for allowance. Accordingly, Claim 19 is believed to be in condition for allowance.

The Examiner disagrees. Since the response to the fourth argument has shown that independent claim 16 is rendered obvious, claim 19 is dependent upon claim 16, and no additional arguments have been provided claim 19 then claim 19 is still rendered obvious.

### ***Conclusion***

60. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

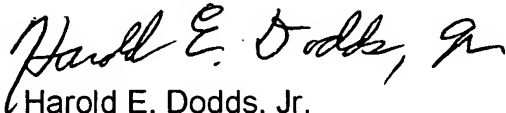
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

61. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (571)-272-4110. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571)-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Harold E. Dodds, Jr.  
Patent Examiner  
June 27, 2005



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PRIMARY EXAMINER